AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

- 1. 13. (Cancel)
- 14. (new) A transgenic plant expressing a temporin cationic peptide.
- 15. (new) A transgenic plant comprising a recombinant nucleic acid molecule, wherein the nucleic acid molecule encodes a temporin peptide.
- 16. (new) The transgenic plant of claim 15, wherein the nucleic acid molecule comprises SEQ ID NO: 15.
- 17. (new) The transgenic plant of claim 15, wherein the temporin peptide comprises an amino acid sequence selected from the group consisting of SEQ ID NOS: 17-26.
- 18. (new) The transgenic plant of claim 17, wherein the temporin peptide further comprises an N terminal peptide extension of between 2 and 25 amino acids in length.
- 19. (new) The transgenic plant of claim 18, wherein the N-terminal peptide extension is AMWK (SEQ ID NO: 39), ASRH (SEQ ID NO: 40), or ALWK (SEQ ID NO: 41).
- 20. (new) A transgenic plant comprising a recombinant nucleic acid molecule, wherein the nucleic acid molecule encodes a fusion peptide having a formula P-T, wherein T is a temporin peptide and P is an anionic pro-region peptide.

- 21. (new) A transgenic plant comprising a recombinant nucleic acid molecule, wherein the nucleic acid molecule encodes a fusion peptide having a formula P-S-T, wherein T is a temporin peptide, P is an anionic pro-region peptide and S is a spacer peptide.
- 22. (new) A transgenic plant comprising a nucleic acid molecule encoding a peptide comprising an amino acid sequence selected from the group consisting of:
 - (a) SEQ IDs: 17-26 and fragments thereof;
- (b) amino acid sequences that differ from an amino acid sequence specified in (a) by one or more conservative amino acid substitutions; and
- (c) amino acid sequences that share at least 90% sequence identity with an amino acid sequence specified in (a),

wherein the peptide has temporin biological activity.

- 23. (new) The transgenic plant of claim 22, wherein the peptide further comprises an anionic pro-region peptide operably linked to the N-terminus of the peptide.
- 24. (new) A transgenic plant comprising a recombinant nucleic acid molecule encoding a peptide comprising SEQ ID NO: 34.
- 25. (new) The transgenic plant of claim 22, wherein the amino acid sequence shares at least 95% sequence identity to SEQ ID NO: 17.
- 26. (new) The transgenic plant of claim 18, wherein the recombinant nucleic acid molecule comprises SEQ ID NO: 33.
- 27. The transgenic plant of claim 21, wherein the temporin peptide comprises SEQ ID NO: 18.

Express Mail No. EV339203617US
Date of Deposit: November 20, 2003
Attorney Reference Number 7013-67324
Application Number _____

SLR:dm 11/20/03 234929 PATENT

28 (new) The transgenic plant of claim 18, wherein the N terminal peptide extension comprises MAMWK (amino acids 1-5 of SEQ ID NO: 28) or MASRH (amino acids 1-5 of SEQ ID NO: 33).